Understanding success and failure in mergers and acquisitions

McCarthy, Killian Jonathan

CHAPTER FOUR – MERGER PURPOSE

"Most observers agree that mergers are driven by a complex pattern of motives,
and that no single approach can render a full account.
But knowing that the world is complex cannot
be the end of scientific endeavor"

(Trautwein, 1990)

CHAPTER FOUR –MERGER PURPOSE

MERGER MOTIVES AND THE REALISATION OF GAINS*

1. INTRODUCTION

The extent to which the attainment of 'synergies' plays a role in motivating mergers is subject to an intense and long-standing debate (Andrade et al., 2001)[2].

The theories of hubris (Roll, 1986), risk diversification (Amihud and Lev, 1981), reputation (Scharfstein and Stein, 1990), herding (Devenow and Welch, 1996), entrenchment (Shleifer & Vishny, 1989) and empire building (Marris, 1963) suggest that most mergers are motivated by managerial interests. But perhaps the most testable and widely accepted of these is Jensen's (1986) free cash flow hypothesis.

Jensen (1986) suggests that as the level of free cash flow (FCF) – that is, the level of liquidity in excess of the investment required to fund positive net present value projects – increases, so too does the degree of managerial discretion. Excess liquidity, it is argued, provides managers with the opportunity to make self-serving acquisitions (Jensen, 1986), and so magnifies any agency issues that may already be present. Indeed, several empirical studies have demonstrated that financial slack has a directly negative relation with acquirer returns (see e.g., Lang, Stulz and Walkling, 1991, Schlingemann, 2004, Smith and Kim, 1994; Martynova and Renneboog, 2008).

Jensen's (1986) hypothesis is thought to apply generally. We suggest, however, that the moderating effects of liquidity are likely to be more clearly visible in some merger motives than in others. That is the central assertion of this paper.

To account for this suggestion, we first build upon the contributions of Chatterjee (1986), Houston et al. (2001), and Devos et al (2008) and identify four distinct merger motives, namely: 'strengthen existing operations', 'product diversifications', 'geographic expansion', and the 'cutting of costs'. Then, using Thomson Reuters' SDC mergers and acquisitions database, and a set of 3,257 U.S. mergers announced between January 1, 2000 and December 31, 2006, we estimate the relationship between merger announcement and abnormal acquirer returns with an event study methodology. Finally, and having established the resultant 'purpose-performance' relation, we interact each of the four merger motives with the acquirers' free cash flow, in order to study the moderating effects of excess liquidity.

We find: (1) that most mergers are expansionary. Our results show that 'product diversification' and 'geographic expansion' are not only two of the most commonly announced merger motives, but also that they are most likely to be the only announced reason for a takeover. In contrast, we find that 'cost reduction' is more typically announced as part of a bundle of motives, while 'market share' motives are typically announced as a secondary purpose. (2) We see that shareholders are not convinced of the synergies that these expansionary motives claim to generate. In fact, we find strong evidence that 'product diversification' and 'geographic expansion' are each associated with significantly lower announcement returns. (3) We find, however,

---

[1]* By Killian J McCarthy, and Utz Weitzel (Nov 2010). A version of this paper was presented at the 2009 SOM PhD Conference, Groningen, (March 2009)

[2] We uses the terms 'merger', 'acquisition', 'takeover' and 'M&A' synonymously.

that some expansionary motives are received favorably, if the acquirer has sufficient levels of excess liquidity. This applies in particular to geographical expansion and suggests that liquidity is seen as a necessary condition for firms seeking a flexible and efficient expansion. (4) Because we find support for agency effects in general, our results support but qualify Jensen's (1986) FCF hypothesis, by providing evidence for positive moderator effects of slack. Finally, (5) we find that it is important to take multiple motives into account when assessing performance, as the average merger is motivated by a bundle of reasons, and the predictive power of each motive in isolation is actually quite limited. In fact, we find that geographic expansion is the only one of our merger motives that consistently predicts poor performance amongst mergers.

In doing so, this paper contributes to our understanding of which mergers work and why, and enhances our understanding of the role of liquidity. *Section Two* introduces the literature and builds hypotheses on merger motives and the moderating role of excess liquidity. *Section Three* introduces the data and methods employed in the paper, *Section Four* presents the results, and *Section Five* discusses theses.

2. HYPOTHESES

2.1. On the Origin of Gains

The origin of merger gains is the subject to a long-standing debate. And yet only a few studies examine the relationship between merger motives and acquirer returns.

In one of the earliest, Chatterjee (1986) identifies three merger motives, namely: the attainment of 'operative', 'financial', and 'collusive' gains, which are attainable, it is suggested, by horizontal mergers within the same industry. Houston et al. (2001) focuses specifically on the 'operative' measures – broadly defined as measures to increase efficiencies or revenues – and splits the mergers in his sample into two, which are classified as measures to 'expand revenue', or 'reduce cost'. Krishnan et al. (2007) distinguish between three motives, namely: the attainment of 'market power', 'cost reduction' and 'complimentarity', which are understood to be an expansion into new products or regions. Finally, and most recently, Devos et al. (2008) develops a two-stage approach, which builds on all of these, by first comparing 'operative' synergies and 'market power gains', and then splitting operative synergies into mergers designed to: 'increase operating profits' or 'reduce investments'.

We identify four motives in our study: (1) 'strengthening existing operations'; (2) 'product diversification'; (3) 'geographic expansion'; and (4) cost-cutting. As four sources of gains, we develop hypotheses on each of these in this section.

2.1.1 Strengthening Existing Operations

At the highest level, mergers can be used to explore new markets and new product potential, or to build upon and strengthen existing market operations. A horizontal merger – between firms in the same industry – is therefore said to be an 'exploitative' merger. 'Explorative' mergers are mergers that expand the firm into new products, technologies and geographical regions (Dosi et al., 1990), and in doing so 'disrupt and destroy the firms existing competences' (Abernathy and Clark, 1985). 'Exploitative' mergers, by contrast, see the firm 'stick to what it knows', by exploiting it's existing resources, and by refining it's existing technologies (March, 1991; Nooteboom, 1999), and as such are relatively cheaper and less risky. Exploitative mergers produce more immediate and tangible gains by directly 'enhanc[ing] the value of [the firms] existing competences' (Abernathy & Clark,

1985), and research has shown that firms that exploit their 'competencies', and strengthen their existing market operations, enjoy positive abnormal returns (Rumelt, 1974; Montgomery, 1979; Bettis, 1981). Explorative mergers have 'less certain outcomes, longer time horizons, and more diffuse effects' (March, 1991), and are typically therefore found to destroy value (Weston et al., 2004; Mukherjee et al., 2004; Hoskisson and Hitt, 1988). Because of this – and from a competencies point of view – we suspect that horizontal mergers, which seek to strengthen the firms operations, will be better received by shareholders, and will out-perform those of an explorative nature in an unrelated industry.

A merger between two firms in a related industry can also reduce competition, however, and may allow a newly merged firm to increase the prices it charges its customers. The resultant wealth transfer – from the firm's customers and suppliers to its shareholders – can produce, it is suggested, an additional gain in the form of 'collusive' synergies. The existence of this redistributive wealth effect is, however, still the source of some debate (Martynova and Renneboog, 2003). Mukherjee et al. (2004) report that only 4.3% of financial executives are motivated by the attainment of 'increased market power', and consistent with prior studies (see e.g., Eckbo, 1983), Fee and Thomas (2004), Shahrur (2005) and Devos et al. (2008) find little evidence that mergers lead to increased market power gains. Chatterjee (1986) and Gugler et al. (2003), however, show that the average profitable merger significantly increases profits through the attainment collusive synergies, and Kim and Singal (1993), and more recently Sapienza (2002), evidence changes in the product prices charged by acquirers after a merger, in studies of both the airline and banking industries.

A merger between firms in the same industry will therefore, we suggest, produce positive gains, either in the form of increased competency, or collusive synergies, or both. In either case, the announcement of such a merger should be well received by the market. Thus:

***Hypo 1**: Mergers aimed at strengthening the firms existing operations will be positively related with acquisition returns.*

2.1.2 Product Diversification

A merger which expands into new products and services (hereafter products) is said to be an explorative merger, and is described as a 'diversification'.

Diversification was once thought to generate value (Martynova and Renneboog, 2008), as the conglomerate structure: (a) reduces earnings variability (Lewellen, 1971) and the risk of bankruptcy (Higgins and Schall, 1975; Shleifer and Vishny, 1992); and (b) allows the firm to sidestep imperfections in the external capital market (Williamson, 1970; Bhide, 1990; Hubbard and Palia, 1999), while sustaining a higher level of leverage (Lewellen, 1971). It is now recognized, however, that diversification is not costless (Datta et al., 1991); a large number of studies document poor performance for diversifying mergers. Diversification creates: (a) increased control and coordination costs (Jones and Hill, 1988); (b) bargaining problems within the firm (Rajan et al., 2000); (c) bureaucratic rigidity (Shin and Stulz, 1998); (d) information asymmetries (Williamson, 1967); (e) production inefficiencies (Lancaster, 1990); and (f) causes growing strains on top management teams (Grant et al., 1988). These, and other internal 'governance bottlenecks', increase with the level of diversification (Hitt et al., 1994), and destroy shareholder value, to the point that the costs typically outweigh the benefits (Lichtenberg, 1992; Liebeskind and Opler, 1993).

Furthermore, the 'managerial theories of the firm' suggest that diversification destroy value, because diversifying mergers are more likely to suffer from agency (Baumol, 1962). Diversification, it is suggested, allows managers: (a) to entrench, and reduce their human capital risk (Amihud and Lev, 1981; Schleifer and Vishny, 1989); (b) increase their discretion; and (c) build 'empires', power and prestige (Mueller, 1969; Rhoades, 1983). Shleifer and Vishny (1990) suggest that this sort of thinking played an important role in motivating the third merger wave (1960-70), and led to the creation of inefficient conglomerates, with insufficient incentive to focus on shareholder concerns. Because of this, the announcement of a product-diversifying merger is often interpreted as being an outgrowth of agency (Martynova and Renneboog, 2008). And this places what the literature reefers to as a 'diversification discount factor' on the acquirer's returns (Lang and Stulz, 1994).

A diversifying merger will therefore, it is suggested, destroy shareholder value, for strategic or managerial reasons, or both. Consequently, the announcement of such a merger will, be poorly received by the market. And this thinking leads us to suggest:

***Hypo 2**: Diversifications will be negatively related with acquisition returns.*

2.1.3 Geographic Expansion

A merger that expands the acquirers' presence into a new city, state or geographical region is said to be an explorative merger, and is described as a 'geographic expansion'. Geographic expansions, it is suggested, can be driven by the desire to expand the firms' revenue, or to reduce its costs (Besanko et al., 2006).

Geographic expansions allow for the realisation of efficiencies in scale economies (Markides and Ittner, 1994, Markides and Oyon, December 1991, Morck and Yeung, 1991), and for a reduction in purchasing, management, finance, R&D, marketing and production costs (Besanko et al., 2006; Markides & Oyon, 1991; Morck & Yeung, 1992; Markides & Ittner, 1994). According to these and other studies of cross-border mergers, geographic expansion improves the competitive standing of the firm – provided that the firms are sufficiently related (Dos et al., 2008) – because geographically diverse operations not only benefit from local specialization and improved capacity utilization and technical efficiency, but all without necessarily giving up their local responsiveness.

A large number of studies, however, document poor performance for geographically expansionary mergers (Rossi and Volpin, 2004). Gozzi et al. (2008) finds that the Tobin's Q of a firm decreases after an expansion, and others have shown that any gains to such mergers are, at best, 'transitory' (Sarkissian and Schill, 2008; Levine and Schmukler, 2006). Child et al. (2001) suggests that this may be because mergers outside of the home market often face 'unforeseen and insurmountable challenges'. In fact, several studies show that, in an international context, lower institutional quality in the host countries negatively affect the frequency, size, and performance of cross-border deals (Rossi and Volpin, 2004; Weitzel and Berns, 2006). Roll (1986) suggests that managers pursuing cross-border deals may, however, be fully aware of the challenges but, because of 'hubris' or over-confidence, may simply 'feel' that 'their deal' will be different. Others are less forgiving. And proponents of the 'managerial theories of the firm' (Marris, 1963) suggest that cross-border mergers are often little more than agency driven attempts to grow the firm beyond its optimal size, designed to maximize managerial power or prestige, or to build empires (Rhoades, 1983; Ravenscraft and Scherer, 1987). Indeed, several studies find that empire building plays at least some role in expansionary merger

decisions (Rhoades, 1983, Ravenscraft and Scherer, 1987). Because a merger which expands without a clear link to greater profitability cannot be expected to realize the optimal, in terms of positive gains, the announcement of an expansionary merger, it is suggested, will be treated skeptically by the market.

Geographical expansions, like product diversifications, may therefore include a substantial 'diversification discount'. Next to possible agency effects, this captures the added complexity and uncertainty of entering regions where the firm has no 'geographic core competence', which together serve to destroy shareholder value. As a result, the announcement of such a merger will be poorly received. Thus:

***Hypo 3**: Expansionary mergers will be negatively related with acquirer returns.*

2.1.4 Cost Reduction

Finally, a merger designed to create 'cost synergies' by eliminating duplication, and reduce the firms operating costs, is described as an exploitative merger.

Previous research suggests that the achievement of such cost synergies is a prominent motive for mergers (Devos et al., 2008, Krishnan et al., 2007). One explanation is that it is often easier to implement cost reductions than it is to achieve revenue enhancements (Carey, 2000). Workforces, for example, are one of the more common victims of the cost reduction process, because workforces present one of the more significant – and one of the most easily reduced – costs for the firm (Krishnan et al., 2007). And although some scholars warn that such downsizing measures may unnecessarily erode the firm's knowledge base (Cascio et al., 1997; Chadwick et al., 2004; Krishnan et al., 2007), or server to create disgruntled employees (Gutknecht and Keys, 1993; Lee, 1997), a large number of studies find a positive relationship between downsizing and performance (Bowman and Singh, 1993; Love and Nohria, 2005).

In mergers, 'cost reductions' typically refers more broadly, however, to the elimination of redundancies and duplication in related operations (Gaughan, 2007; Weston et al., 2004). In the pharmaceutical industry, for example, where fixed R&D costs are typically high, this means that laboratories researching identical topics (diseases) can be streamlined to cut costs. And the same can be true of consumer banking, where one of two branch offices in the same neighborhood may easily be closed, so that the other can offer an integrated service.

Measures aimed at eliminating duplication are widely recognized to create positive value (Devos et al., 2008, Bradley et al., 1988, Mulherin and Boone, 2000, O'Shaugnessy and Flanagan, 1998). This, coupled with the fact that cost-cutting mergers are 'exploitative' – and exploitative mergers are thought, in general, to 'enhance the value of [the firms] existing competences' (Abernathy & Clark, 1985) and to create positive abnormal returns (Rumelt, 1974; Montgomery, 1979; Bettis, 1981) – the suggestion is that the announcement of a cost-cutting mergers will be well-received by the market. This reasoning leads us to suggest:

***Hypo 4**: Cost-cutting mergers will be positively related with merger returns*

2.2. On the Moderating Effects of Financial Slack

According to many prominent scholars, the impact of a merger on the performance of the acquiring firm is, at best, "inconclusive" (Haspeslagh and Jemison, 1991, Roll, 1986, Sirower, 1997), and at worst "systematic[ally]

detrimental" (Dickerson et al., 1997). A number of value-destroying explanations have been put forward to explain this finding, ranging from the managerial theories of hubris (Roll, 1986) reputation (Scharfstein and Stein, 1990) and risk diversification (Amihud and Lev, 1981), to the theories of entrenchment (Schleifer and Vishny, 1989), and empire building (Marris, 1963). Perhaps the most widely accepted of these is, however, Jensen's (1986) free cash flow (FCF) hypothesis.

In essence, Jensen's (1986) FCF hypothesis suggests that firms with a higher level of free cash – that is, firms whose internal funds are in excess of the investments required to fund positive net present value projects – are more likely to make quick strategic decisions, and are more likely to engage in large-scale strategic actions with less analysis than their cash-strapped peers. High levels of liquidity, it is suggested, increase managerial discretion, making it possible for managers to choose poor acquisitions when they run out of good ones (Martynova and Renneboog, 2008). Moreover, it is suggested that in a 'cash flush firm' the other stakeholders will be more likely to give management the benefit of the doubt, and to approve acquisition plans on the basis of fuzzy and subjective concepts such as managerial 'instincts', 'gut feelings' and 'intuition', based on high past and current cash flows (Rau and Vermaelen, 1998). Thus, like the hubris theory (Roll, 1986), the theory of FCF suggests that otherwise well-intentioned mangers may also make bad decisions simply because the quality of their decisions are less challenged than they would be in the absence of excess liquidity. Of course though, as the degree of managerial discretion increases in FCF, or in high market valuations (Rau and Vermaelen, 1998), so too does the opportunity for self-interested managers to pursue self-serving acquisitions (Jensen, 2005). And indeed several empirical studies demonstrate this, and show that the abnormal share price reaction to takeover announcements by cash-rich bidders is negative and decreasing in the amount of FCF held by the bidder (Lang et al., 1991; Schlingemann, 2004; Smith and Kim, 1994; Harford, 1999).

Jensen's (1986) free cash flow hypothesis is thought to apply generally, to all mergers. As discussed in relation to *Hypotheses 2* and *3*, however, we suggest that increased agency costs may be associated with particular merger motives. In other words, we suggest that the effects of agency will be more clearly visible in some merger motives than in others. For example, the market's reaction to the announcement of a diversification into new regions may, we suggest, be interpreted as value-destroying 'empire building' or as a value-increasing expansion, contingent on the level of financial slack as an indicator of agency costs. We therefore consider the consequence and effect of financial slack on the performance of each of the merger motives in turn, as measured by acquirer abnormal returns. If agency costs affect all motives we would expect there to be a negative moderator effect of free cash flow on the returns of each motive. If not, we suspect that its moderating effects will be more clearly visible in the expansionary motives exploring new markets and new product.

Hypo 5*: Higher levels of financial slack will negatively moderate the relationship between expansionary motive and acquirer returns.*

3. METHODOLOGY

3.1. Sample

The data against which we test these hypotheses has been made available by Thomson Reuters, and published in the form of the SDC merger database.

We refine this to include: (1) acquisitions announced between January 1, 2000 and December 31, 2006; (2) acquisitions completed or withdrawn before January 1, 2008; (3) acquirers seeking to buy 100% of target shares at announcement; (4) acquirers and targets of U.S. origin; (5) acquirers which are publicly listed; (6) deal greater than 10 million US$; (7) deal transaction values which are at least 1% of the market value of the acquirer (four weeks prior to the announcement); (8) acquisitions which do not involve a recapitalization, repurchase of own shares, or a spin-off to existing shareholders; (9) acquisitions where neither the acquirer nor the target is fully or partially owned by public authorities, such as the U.S. government; (10) where the acquirer and the target are not part of the same group (i.e: do not have the same ultimate parent); and (11) where none of the financial variables needed for our analyses (see below) are missing. In doing so, we create a set of 3,794 merger observations.

Table 1: Programming for Merger Motives

Motives	Key Words
Strengthening Existing Operations/Market Share	Increas/e/es/ing, Improv/e/es/ing, Expand/es/ing, Strengthen/s/ing, Bolster/s/ing, Boost/s/ing, Solidify, Support/ing, Enhanc/e/es/ing, Market Share, Operations, Business, Position, Leader(ship), Existing, Core, Focus
Product Diversification	New Product(s)/Service(s), Product/Service Extension(s)/Expansion(s)m Expand Product(s)/Service(s), Product/Service Portfolio(s), Extend/Expand Portfolio(s), Portfolio Extension(s)/Expansion(s), Diversify, Diversification(s)
Geographic Expansion	Geographic, Geographical/ly, Region(s), Regional
Cost-cutting	Cost synergy(ies), Duplicate/e/eve/ion, Saving(s), Cut/ting, Reduc/e/tion, Efficienc/y/ies, More Efficient, Consolidate/e/ion

3.2. Independent Variables

As independent variables we create four indicators variables, identifying mergers as being motivated by the attainment of: 'market share' (MKT); 'cost saving' (CST); 'product diversification' (PROD); and/or 'geographical expansion' (GEO).

We programme these with the assistance of a string variable – provided by the SDC –which lists the officially announced motive for the merger makes this possible. This states, for example, that "the purpose of the transaction was to broaden the geographic reach of Flotek Industries Inc." We delete 164 cases where only the target's merger motives are mentioned, and 20 cases where the text variable did not contain any text at all. We also drop 353 cases where the purpose could not be discerned. For example: "the purpose of the transaction was to increase shareholder value". In doing so, we create a final sample of 3,257 observations, and using a content coding methodology, program these according to the following process.

First, and after confirming the accuracy of the SDC variable[3], we 'machine code' for key words relevant to each of the four strategies. *Table 1* lists the search terms employed. Then, and because these key words were not sufficiently discriminating, we manually checked and corrected the results for 'obvious errors'.

[3] We check for accuracy by comparing 100 randomly selected purpose texts with the original press releases. We retrieve 94 of these, and in all case the purpose variable reflected a full or partial quotation of the merger motive.

'Obvious errors' occur when an observation is incorrectly coded, because a key word is present in the description, but in the wrong context. For example, in searching for the keyword 'operations' any company with the term 'operations' in its name will produce a 'hit', even if the actual merger motive differs significantly. In this case, the indicator variable for the motive 'strengthening existing operations' must be manually recoded from MKT=1 to MKT=0. Then, we manually checked and corrected for 'obvious omissions'. These occur when an observation is incorrectly coded, because a key word is not present in the description. For example, when a merger specifically mentions a geographical location – such as the 'the Western states' or the 'New York area' – the automated process will, clearly, not produce a positive result. In these situations the indicator variable must therefore be manually recoded to GEO=1.[4]

3.3. Dependent Variable

We hypothesize that the merger motive is related to abnormal acquirer returns, which we proxy for performance. We follow Brown and Warner's (1985) standard event study methodology in measuring performance, computing cumulated abnormal returns (CARs) for the 21-day period (-20, 1) around the announcement date. We start 20 business days (4 weeks) before the announcement to include pre-bid run-ups (Schwert, 1996). And following Fuller et al. (2002) and Dong et al. (2006), we estimate a modified market adjusted model:

$$AR_i = r_i - r_m$$

Here, AR_i is the acquirer i's abnormal return, winsorized between 1% and 99%, r_i is the stock return on acquirer i, and r_m is the return of the S&P 500 market index. Since our sample includes frequent bidders, we do not estimate market parameters based on a time period before each bid because there is a high probability that previous merger attempts would be included in the estimation. This would make beta estimations less meaningful (Fuller et al., 2002).

3.4. Model Specification

We model the acquirers' abnormal return using the following specification:

$$AR_{i,j,t} = \beta_0 + \beta_1 P_{i,j,t} + \beta_2 G_{i,j,t} + \beta_3 C_{i,j,t} + \beta_4 M_{i,j,t} + \beta_5 \mathrm{F}_{i,j,t-1} + \beta_6 \mathrm{D}_{i,j,t} + \varepsilon$$

where $AR_{i,j,t}$ = acquirer i's abnormal return in taking over target j in year t
$P_{i,j,t}$ = a dummy variable indicating diversification as merger motive
$G_{i,j,t}$ = a dummy variable indicating geographic expansion as merger motive
$C_{i,j,t}$ = a dummy variable indicating cost saving as merger motive
$M_{i,j,t}$ = a dummy variable indicating the 'strengthening existing operations' as merger motive
$\mathrm{F}_{i,t-1}$ = a vector with firm-specific control variables for acquirer i and target j in year $t-1$ (described below)
$\mathrm{D}_{i,j,t}$ = a vector with transaction-specific control variables for the deal between acquirer i and target j in year t (described below)
ε = a normally distributed error term.

[4] See Appendix A for an example of the coding processes involved in producing the GEO variable.

In all estimations we control for unobserved effects by including year dummies. We correct for possible correlations within the acquirers' industries by clustering at the two-digit Standard Industrial Classification (SIC) code industry level, according to Froot (1989) and Wooldridge (2002), and adjust all reported standard errors for heteroskedasticity using the Huber (1967) and White (1980) sandwich estimator (or 'robust estimation') of variance.

3.5. Moderator Variable

We follow Davis and Stout (1992), and use acquirer operating cash flow, normalized to acquirer total assets (both available from SDC), to calculate the firms free cash flow. This variable, as well as all other financial or accounting variables below, refers to the period of the last four quarters before the announcement, and is winzorised between 1% and 99%.

3.6. Control Variables

Because an extensive literature shows that several firm- and deal-specific characteristics are related to merger performance (King et al., 2004), we include a number of control variables (in vectors $F_{i,t-1}$ and $D_{i,j,t}$) in the base specification.

We include: (1) the acquirer's market value in our model, 4 weeks prior to the announcement (in billion US$), because Moeller et al. (2004) show that acquirers size matters. (2) We compute a leverage variable, by dividing acquirer total debt by acquirer total assets, because Jensen (1986) shows that debt reduces agency, and Hitt et al. (1998) shows that leverage affects the outcome of acquisitions. (3) We create an indicator variable equal to 1 if the target is a public company, because Officer (2007) and Chang (1998) provide evidence that acquirer returns differs from public to private targets. (5) We control for the total consideration paid for the acquisition (in billion US$), because Moeller et al. (2005) show that relatively few large loss-making deals contributed significantly to the low average performance of mergers, and because Carline et al. (2002) shows that deal value is a significant characteristic when explaining firm performance. (6) We include the number of bidders in the takeover contest, and use an indicator variable equal to 1 if the target's board officially rejects the takeover bid, because both have been found to impact acquirer returns (Betton and Eckbo, 2000; Schwert). (7) We include an indicator variable equal to 1 if the SDC reports that the acquisition was made by tender offer, because tender offers are found to be positively related with acquirer returns (Jensen and Ruback, 1983). (8) Because takeover bids that are not completed can be negatively related to acquirer announcement returns (Jensen and Ruback, 1983; Chatterjee, 1992), we include an indicator variable which equals 1 if the SDC reports them as 'withdrawn'. And finally (9) because mergers in the same industry are found to be more profitable (Gaughan, 2007; Chatterjee, 1986), we compute an indicator variable equal to 1 if the target and acquirer share the same primary two-digit SIC code.

3.7. Sample Description

Table 2 reports the number and type of mergers, by motive. We can see that 'product expansion' and 'market share' are the most frequently announced merger motives. Also, we see that an increasing number of mergers were announced,

beginning 2004; rising from about 400 to 600 per annum. DePamphilis'(2008) suggests that this is evidence of a 'sixth merger wave', which began around this time.

Table 2: Number of Merger Motives per Year.

year	# mergers	New product	New region	Cost saving	Market share
2000	377	213	72	60	236
2001	312	175	68	38	179
2002	416	260	115	26	268
2003	403	254	101	36	198
2004	571	354	152	35	300
2005	591	380	155	21	295
2006	587	363	152	33	422
Total	3257	1999	815	249	1898

Table 3: Merger Motives per Industry

Acquiror industry	# mergers	# purposes	#purpose per merger	New product	New region	Cost saving	Market share
Agriculture	5	8	1,6	5	1	0	2
Mining	138	220	1,6	74	51	13	82
Construction	29	48	1,7	12	17	1	18
Manufacturing	1057	1614	1,5	792	93	90	639
Transp.,Utility	115	189	1,6	55	50	13	71
Communication	149	235	1,6	74	58	13	90
Wholesale,Retail	161	258	1,6	85	55	17	101
Insur.,Real Est.	369	563	1,5	180	172	19	192
Finance other	422	621	1,5	139	234	33	215
Services	812	1205	1,5	583	84	50	488
Total	3257	4961	1,5	1999	815	249	1898

Table 3 provides a break-down of merger purposes at the industry level. From it we can see: (1) that the number of mergers differs significantly between industries (from 1,057 in manufacturing to 5 in agriculture); and (2), because the number of announced purposes is significantly higher (4,961) than the number of mergers (3,257), that the average merger is announced with more than one motive. The average merger, in fact, has 1.5 motives. *Figure 1* plots the relative importance of the individual motives across industries. From it we see that product expansion dominates in agriculture, manufacturing and services, while geographic expansion play a strong role in construction and financial services (ex insurance and real estate), and cost-cutting has a universal but less significant appeal. *Table 4* shows that up to four merger purposes can be announced at any one time. For less than half of all mergers only one motive is recorded, two purposes are announced in 44% of cases, and only 11% of mergers are pursued with three or four concurrent motives.

The last four columns of *Table 4* provide a break-down of the individual motives per class of concurrent announcements. Here, two contrasting distributions across classes can be detected. Firstly, the motives to expand into new products or regions seem to be 'primary purposes', which are relatively frequent when only one or two motives are announced. Contrasting this, cost reduction seems to be typically announced as a 'secondary purpose'. Their relative frequency increases in the number

of concurrent merger motives, while the frequency of 'primary purposes' decreases in the number of other motives. Between these two extremes, 'market share' motives are seen to play a strong supportive role as a 'secondary purpose'. Although it is also quite prominent as a primary purpose, it appears that its relative strength seems to lie in its combination with one or two other motives.

Table 1: Frequency of Specific Merger Motives per Industry

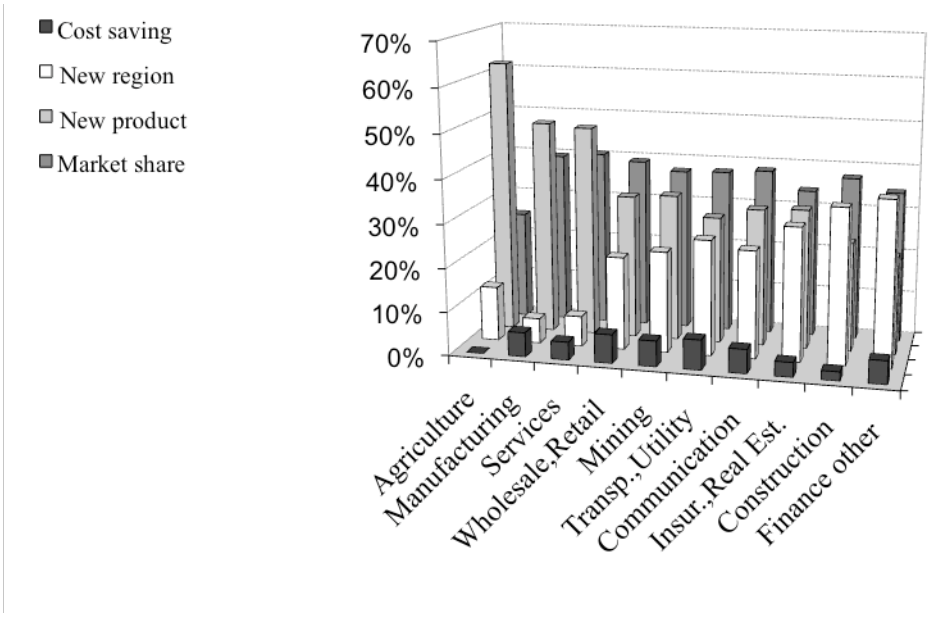

Table 4: Concurrent Merger Motives

Number of concurrent motives	Number of mergers	Percent of mergers	New Product	New Region	Cost Synergy	Market Share
1	1445	44.4%	658	326	86	375
2	1459	44.6%	1007	366	98	1170
3	349	10.7%	323	117	57	342
4	11	0.3%	11	6	8	11

Table 5 reports the pairwise correlations for all primary variables in our model, as well as their means and standard deviations. And although a number of correlations are statistically significant at the 1% level, no coefficient exceeds an absolute level of 0.35. We test for multi-collinearity by computing variance inflation factors (VIF). None of the independent variables exceeds a VIF-value of 1.81, with a mean of 1.60 for all independent variables. Because these are below the established cut-offs, we conclude that multi-collinearity is not an issue.

[See TABLE 5 – Pairwise Correlations, Means and Standard Deviations]

4. RESULTS

We estimate several robust ordinary least square regressions to test the five hypotheses. *Tables 6* and *7* report the results of the different specifications, and the 15 models produced will be referred to hereafter as Models 1 to 15.[5]

[See TABLE 6 – Test of Hypothesis 1- 4]

4.1. On the Origin of Gains

Model 1 only includes the control variables discussed above. The negative significance of cash flow illustrated in this, and in all other models, provides support for Jensen's (1986) hypothesis that financial slack predicts underperforming mergers.

Models 2 to *5* then tests the individual merger motives, without controlling for the possible existence of other motives. In each model a dummy variable is used to indicate whether a specific motive is present, compared with the situation that this motive is not present. From the results we see that – with the exception of geographical expansion - none of the motives affects bidder returns in a statistically significant way when studied in isolation. This is not surprising, however, as we know from *Table 3* that the average merger has more than one motive. Because a merger that aims to cut costs is, for example, likely to be quite different to a merger that announces such a purpose in combination with several other motives, individual merger motives are an understandably incomplete predictor of performance.

Cognizant of this, *Model 6* controls for the presence of other motives, and shows that the predictive power of merger motives increases when at least two are used. From the results we find support for *Hypotheses 2* and *3*, which suggests that mergers expanding into new products and new regions carry with them an expectation of poor performance. As illustrated by *Table 4*, more than half (55.6%) the mergers in our sample announced multiple motives: 44.6% announce two motives. Up to this point, however, we did not test for the effects of specific combinations of merger motives. And although we controlled for the presence of other motives in *Model 6*, the coefficients of the individual motives still reflect an average effect across all existing combinations with other motives. The reaction to a merger, however, that aims to cut costs and expand into new regions is, for example, likely to be quite different to a merger that intends to expand into new products and regions simultaneously, or to increase the market share in existing products while moving into new regions. Because the average merger includes two motives, we therefore test all pairwise combinations of motives, after controlling again for the presence of all individual motives, as in Model 6. *Table 7* reports the results of these motive pairs.

[See TABLE 7 – Test of Hypothesis 1 – 4]

In *Model 7* only one of the four motive pairs is statistically significant: 'new product' in combination with 'new region'. The positive sign of the coefficient

[5] As stock return series typically follow a random walk (Brealey and Myers, 1996 Chapter 13), influenced by a multitude of factors, the R-squares in cross-sectional event studies are generally quite low. The level of R-squares in this paper are comparable with other event studies in M&A that use similar econometric specifications (see e.g., Fuller, Netter and Stegemoller, 2002, Dong, et al., 2006, Moeller, Schlingemann and Stulz, 2004).

contrasts the negative effects observed in the individual cases in *Table 6*. Possible explanations for this will be discussed in the following section. The results of *Models 8* and *9* support the robustness of the previous specifications. *Model 10*, however, provides an additional result: the counter-intuitive combination of diversifying into new products while simultaneously strengthening existing market shares is negative and significant. We do not, however, consider this to be a robust result, as this relationship is not supported in the reverse case described in *Model 8*.

From *Table 7* we again find evidence to support *Hypothesis 2* and *3*. Geographical expansions are negative and significant in all models – except *Model 10* – and so support the conclusion that geographically expansionary strategies lead to value destruction. *Model 7*, *8* and *9* also support *Hypothesis 2*, on the negative role of product diversification, although here the evidence is somewhat weaker. As discussed in the next section, however, the negative performance of the motive 'new product' is less robust and seems to be more contextual.

4.2. On the Moderating Effects of Financial Slack

In order to test our hypothesis on the role of liquidity, we again estimate several robust ordinary least square regressions, but this time account for the interaction effects between the control variable 'cash flow' and each of the dummies for each of the individual merger motives. *Table 8* reports the results of altogether five interactions models (*Model 11* to *15*).

[See TABLE 8 – Test of Hypothesis 5]

As in *Table 6* and *7*, we see that liquidity produces a negative and significantly effect on performance in all models on *Table 7*. We thus support Jensen (1986) FCF hypothesis. Our results fail to support *Hypothesis 5*, however, on the moderating role of financial slack. Contrary to expectations we do not find evidence to support the conclusion that excess liquidity negatively moderates the relationship between motive and acquirer returns: the results of *Models 12* and *15* show that the interaction of cash flow with geographical expansions (identified by the variable 'CF x New reg') is positive and statistically significant. This suggests that expansionary mergers require a higher level of financial flexibility, and are thus, on average, less affected by shareholders' concerns about agency costs. The coefficients of the interaction effects with other motives are partially also positive, but are not significant. These results remain intact when we control for the presence of other motives (*Model 15*).

5. DISCUSSION

5.1. Findings & Implications

In this paper we identify four merger motives: 'strengthening existing operations', 'product diversification', 'geographical expansion', and 'cost reduction'. We analyze the relationship of each of these with an event study methodology, which considers abnormal stock returns around the merger announcement as a measure of performance. We also consider their interaction with the other motives in motive pairs, as well as with cash flow, which we use as a measure of agency and managerial discretion. Based on the results of the previous two sections, we can now discuss the key findings and implications of this study.

(1) Most mergers are motivated by an expansionary logic.

We show that 'product diversification' is the most commonly announced reason to merge, with 1,999 (or 61%) of our 3,257 mergers listing it as a key merger motive. Some 815 (or 25%) of announcements concern 'geographical expansion', meaning that, taken together, 86% of mergers pursue 'expansionary' strategies. By contrast, we find that only 7% of mergers announced 'cost-cutting' measures, and that while cost-cutting mergers fell in popularity – from 15% of all mergers in 2000 to 5% in 2006 – expansionary strategies increased in their popularity in the same period. Furthermore, and as illustrated by *Table 3*, we see that product diversification and regional expansion are also often announced as the singular merger motive, and less so as part of a bundle of two or more concurrent motives. Thus, despite the 'diversification discount', and a significant body of literature that document poor performances for expansion, it appears that, in practice, these motives are not only very common, but probably the primary reasons for takeover activity. In contrast, we find that 'cost reduction' is more typically announced as part of a bundle of motives, while 'strengthening existing operations' are typically announced as a secondary motive.

(2) Shareholders aren't convinced of 'expansionary' gains....

We find that shareholders do not seem to be convinced of the synergies that expansionary motives – and in particular mergers that aim at developing new products and/or new regions – claim to generate. We find evidence to suggest that the two most expansionary motives (see above) are associated with significantly underperforming returns. Negative and significant results in Tables *6* and *7* suggests that expansionary mergers destroy value. This provides support for *Hypotheses 2* and 3, and is an important finding for decision-makers. It suggests that, on average, shareholders put a 'diversification discount' on any bundle of merger motives that includes geographic or product portfolio expansions. Because of their popularity (see above), this paints a bleak picture for mergers and acquisitions in general, and for managers seeking to pursue external growth in new products or regions in particular …

(3) *...unless financial slack enables expansionary mergers to be successful.*

The effect of acquirers' cash flow is consistently negative and significant throughout our study. Thus, we support Jensen (1986), and find that slack signals agency costs, because the abnormal return to merger announcements of such acquirers is significantly lower. However, our results also show that financial slack positively moderates the relationship between some merger motives and performance. And that some expansionary motives are received favorably, *if* the acquirer has enough resources to pursue the expansion flexibly and efficiently. This is likely because explorative mergers, that expand the firm into new products, technologies and geographical regions (Dosi et al., 1990), are risky – as they 'disrupt and destroy the firms existing competences' (Abernathy and Clark, 1985) – and costly – because experimentation in new products and regions are prone to failure – and so require a significant 'cushion of liquidity' (Majumdar & Venkataraman, 1993; Moses, 1992). Explorative mergers are known to have 'less certain outcomes, longer time horizons, and more diffuse effects' (March, 1991). And so the finding that such mergers can be successful, with the sufficient financial leeway, suggests that Jensen's (1986) agency hypothesis does not fully extend to mergers driven by reasons of geography. Rather, our results suggest that financial slack is a necessary condition for a positive

performance in such acquisitions. Overall, this result is in accordance with Myers and Majluf's (1984) pecking order hypothesis – which supports the accumulation of internal cash on the basis of transaction cost savings – and recent studies in organization theory, which promote a contingency perspective in understanding the role of organizational and financial slack (Cheng and Kesner, 1997; Tan and Peng, 2003: Greenley and Oktemgil, 1998; Wan and Yin, 2009). In particular, it seems that expansionary motives, aimed at moving the firm into new regions benefit from greater financial flexibility. And hence we discover an important qualification for Jensen.

(4) *Exploitative mergers do not produce significant results.*

'Strengthening existing operations' is the second most commonly announced merger motive: some 1,898 of the mergers in our database announce measures designed to capture market share (*Table 2*). Our test of the individual motive (*Table 6*), however, means that we fail to support *Hypothesis 1*: moderately positive but insignificant results suggest that mergers motivated by the attainment of 'increased market share' are not particularly well received by the market. And the same goes for 'cost-cutting' mergers. Despite the positive position adopted by the literature, on the benefits of cost-cutting measures, only 249 (or 7%) of the mergers in our sample pursue cost-cutting strategies. And, like market share motives, their announcement is not particualilly well-received: moderately positive but insignificant results are returned for the test of the individual motives, and so we fail to support *Hypothesis 4*. Logically, given that exploitative mergers are less costly and less risky than explorative mergers, and so do not require as significant a 'cushion of liquidity' (Majumdar & Venkataraman, 1993; Moses, 1992), these results do not change when the moderating effects of excess liquidity are considered (*Table 8*). Our results suggest that, irrespective of the firms cash flows, the market remains unimpressed by the announcement of exploitative merger.

(5) *Mixing explorative and exploitative mergers destroys value.*

Only 375 mergers in our sample list 'increased market share' as a primary merger motive (*Table 3*), while 1,170 list it as a secondary motive. (Eighty-six mergers list 'cost-cutting' as a primary merger motive, compared to 98 that list it as a secondary measure). This suggests that 'strengthening operations' is typically announced in combination with the more expansionary motives – such as product diversification or geographic expansion – and so Porter's (1980) idea of firms getting 'stuck in the middle' could be used to explain the negative and statistically significant coefficients of the corresponding motive pairs on *Table 7*. Mergers which simultaneously attempt to 'explore' and 'exploit' the market – that is, mergers which attempt to 'strengthen' while simultaneously 'disrput[ing] and destroy[ing]' their core competencies (Abernathy and Clark, 1985) – will, it is suggested, do less well than a firm which adopts a more clearly focused strategy, and chooses either to explore or to exploit. The motive pairs for purely exploitative mergers – that is 'strengthening existing operations' and 'cutting-costs' – are statistically insignificant, indicating that exploitative motives are – in contrast to less focused mergers – not value-destroying.

(6) *Multiple Motives better predict merger performance than isolated motives.*

When analyzed in isolation, we find that most merger motives do not predict performance particularly well (*Table 6*). This finding can easily be explained by the fact that the average merger in our sample was found to have more than one (1.5) announced merger motives. And as discussed above, the reaction to a merger that

solely aims to diversify into new products is, for example, likely to be quite different to a merger that announces such a diversification in combination with one or several other motives. The implications for managers, shareholders and future researchers are that it is necessary to take account of multiple motives when assessing the performance of mergers classified by motive. We find, however, that the merger motive of 'geographic expansion' is an exception to the rule: our results (*Tables 6* and *7*) show that geographical expansion consistently predicts underperformance in mergers, whether announced in isolation, or in a bundle of motives.

(7) *The performance effects of product diversification is contextual.*

In contrast to the motive of geographic diversification, which shows a very robust negative relation with acquirer returns (Hypothesis 3), the results for product diversification (Hypothesis 2) are found to be pointing in the same direction, but are less clear-cut. The effects of the individual motive 'new product' do not go into opposite directions, and as such the results are not inconclusive, but we do find some statistically insignificant relations. Overall, this implies that the merger motive 'new product' is more contextual than 'new region'. Our specification-sensitive results with regard to product diversification are actually not very surprising given that almost half a century of research regarding the relationship between product diversification and organizational performance has not produced unambiguous evidence. Datta et al. (1991), for example, in a review of 18 studies published in the period 1962-1988 reports that 3 are positive, 4 are negative, 4 are insignificant and 7 are mixed in their conclusions on the relationship. Later work, such as, for example, Markides (1992), Tallman and Li (1996), Geringer et al., (2000), and Palich et al., (2000), reveals a curvilinear (inverted U-shaped) relationship between diversification and performance. The inconclusiveness of the research on diversification is best explained by Datta et al., (1991) and Hill et al., (1992), each of which refer to the well-known 'contingency argument'. This argument holds that the diversification-performance relationship is not only a function of the diversification profile per se, but is also a result of organizational characteristics, and industry specific conditions. For instance, the finding that diversification is associated with positive acquirer returns when diversifying into other regions (Model 11 and 12) may point towards a contingent effect of the regional macroeconomic environment. Similarly, the curvilinear relation between product diversification and performance, as revealed in the later literature (Palich et al., 2000; Markides, 1992), implies contingent influences. For example, Tallman and Li's (1996) result suggests that the performance effect of diversification is positive as long as the degree of diversification stays within the scope that fits with the firm's strategic resources and capabilities. If not, it is suggested that diversification will lower firm performance. However, this requires more detailed data than that available to this analysis, and goes beyond the scope of this study.

5.2. Limitations

An obvious limitation of our analysis is the fact that we take the officially announced merger purposes at face value. We readily acknowledge that not all publicly stated purposes reflect the true underlying motives for merging. Two factors, may serve to mitigate this problem. First, we explicitly analyze the moderator effects of cash flows (which we employ as a proxy for agency costs), and we find that none of the merger motives is particularly exploited as a cover-up for self-serving mergers. Second, we only study publicly traded U.S. acquirers, and suggest that these have more stringent

fiduciary duties, and are subject to more transparent shareholder information than either private firms in the U.S, or public firms in many other countries. Particularly during the years of our sample, an intensification of shareholder activism, an increase in institutional shareholders, and the enactment of new and unprecedented legislation (e.g., Sarbanes-Oxley), has intensified the pressure for even more transparency in corporate governance, managerial decision making, and in merger processes. Our sample period also stops well before the start of the credit crisis. Although this crisis currently leads to stricter regulation (e.g. to the 'Wall Street Reform and Consumer Protection Act' or 'Dodd-Frank Act' in the US), this is focused on financial transactions in the banking sector, and not on managerial transparency in mergers. We therefore think that it is prudent to assume that, on average, the officially announced merger purposes in our sample period are closer to the underlying motives than to the alternative of consistent and successful deception of the shareholders (who, after all, have to be convinced to support the merger).

5.3. Conclusion

The aim of this paper was to investigate the origin of merger gains, and to analyze the moderating effects of financial slack on these merger motives and this gain. Because the factors affecting success and failure in mergers and acquisitions are so imperfectly understood such a purpose makes, we suggest, an important contribution to the literature. At the highest level, our results demonstrate the existence of a 'purpose-performance relationship', and show that mergers aimed at different synergies produce different gains. We thus support Andrade et al. (2001) in their suggestion that if mergers could be separated according to their underlying motive, then the origin of gains could be better described. In the process, we find that most mergers are explorative and expansionary in their motivation, and that mergers which attempt to exploit their environment are not particularly well received. We show that most mergers announce a number of motives, and that motive pairs consequently have a greater predictive power on performance. Importantly, we also show that excess liquidity cannot solely be interpreted as a predictor of agency. Our results suggest that excess liquidity, or financial slack, is a necessary condition for firms seeking to expand safely into new regions. Thus, for this motive, our evidence supports the accumulation of cash, described by Myers and Mailuf's (1984) pecking order hypothesis, and demonstrates an important qualification for Jensen's well-regarded (1986) hypothesis on the role of FCF.

REFERENCE

Abernathy, W. J., K. B. Clark. 1985. Innovation: Mapping the winds of creative destruction. Research Policy 14: 3-22

Amihud Y, Lev B. 1981. Risk Reduction as a Managerial Motive for Conglomerate Mergers. *Bell Journal of Economics* **12:** 605-617.

Andrade G, Mitchell M, Stafford E. 2001. New Evidence and Perspectives on Mergers. *The Journal of Economic Perspectives* **15:** 103-120.

Babbie E. 2003. *The Practice of Social Research*. Wadsworth/ Thomson Learning Inc.:

Baumol WJ. 1962. On the Theory of Expansion of the Firm. *American Economic Review* **52:** 1078-1087.

Besanko D, Dranove D, Shanley M, Schaefer S. 2006. *Economics of Strategy*. Wiley: New York.

Bettis, R.A. 1981, Performance differences in related and unrelated diversified firms. Strategic Management Journal, 2: 379-393.
Betton S, Eckbo BE. 2000. Toeholds, Bid Jumps, and Expected Payoffs in Takeovers. *The Review of Financial Studies* **13:** 841-882.
Bhide, A. (1990). Reversing corporate diversification, *J. Appl. Corp. Finance* **3**, 70–81.
Bowman, EH and Singh, H, 1993. Corporate restructuring: reconfiguring the firm. *Strategic Manage J* **14**, pp. 5–14
Bradley M, Desai A, Kim EH. 1988. Synergistic Gains from Corporate Acquisitions and their Division Between the Stockholders of the Target and Acquiring Firms. *Journal of Financial Economics* **21:** 3-40.
Brealey RA, Myers SC. 1996. *Principles of Corporate Finance*. McGraw-Hill: New York, NY, USA.
Brown SJ, Warner JB. 1985. Using Daily Stock Returns: The Case of Event Studies. *Journal of Financial Economics* **14:** 3-31.
Carey D. 2000. A CEO roundtable on making mergers succeed. *Harvard Business Review* **78:** 154.
Carline N, Linn S, Yadav P. 2002. The Impact of Firm-Specific and Deal-Specific Factors on the Real Gains in Corporate Mergers and Acquisitions: An Empirical Analysis. *University of Oklahoma Working Paper*
Cascio, W. F., Young, C. E., & Morris, J. R. (1997). Financial consequences of employment-change decisions in major U.S. corporations. Academy of Management Journal, 40: 1175-1189.
Chadwick, A., Glasson, J., Lawton Smith, H., Clark, G., Simmie, J., 2003. Enterprising Oxford: The Anatomy of the Oxfordshire High-tech Economy. Oxford Economic Observatory, Oxford University May 2005.
Chang S. 1998. Takeovers of privately held targets, methods of payment, and bidder returns. *Journal of Finance* **53:** 773-784.
Cheng J, Kesner I. 1997. Organizational slack and response to environmental shifts: the impact of resource allocation patterns. *Journal of Management* **23:** 1-18.
Chatterjee S. 1992. Sources of Value in Takeovers: Synergy or Restructuring - Implications for Target and Bidder Firms. *Strategic Management Journal* **13:** 267-286.
Chatterjee S. 1986. Types of Synergy and Economic Value: The Impact of Acquisitions on Merging and Rival Firms. *Strategic Management Journal* **7:** 119-139.
Child J, Faulkner D, Pitkethly R. 2001. *The Management of International Acquisitions*. Oxford University Press:
Datta DK, Rajagopalan N, Rasheed AMA. 1991. Diversification and performance: critical review and future directions. *Journal of Management Studies* **28:** 529-538.
Davis G, Stout S. 1992. Organization theory and the market for corporate control: a dynamic analysis of large takeover targets, 1980–1990. *Administrative Science Quarterly* **37:** 605-633.
DePamphilis DM. 2008. *Mergers, Acquisitions, and Other Restructuring Activities*. Elsevier Academic Press: Burlington, MA, USA.
Devenow, A. Welch, I. (1996) Rational Herding in Financial Economics, European Economic Review 40 (1996) 603-615

Devos E, Kadapakkam PR, Krishnamurthy S. 2008. How Do Mergers Create Value? A Comparison of Taxes, Market Power, and Efficiency Improvements as Explanations for Synergies. *Review of Financial Studies, Forthcoming*

Dickerson A, Gibson AH, Tsakalotos E. 1997. The Impact of Acquisitions on Company Performance: Evidence from a Large Panel of UK Firms. *Oxford Economic Papers* **49:** 344-361.

Dong M, Hirschleifer D, Richardson S, Teoh SH. 2006. Does Investor Misevaluation Drive the Takeover Market? *Journal of Finance* **61:** 725-762.

Dos Santos MB, Errunza VR, Miller DP. 2008. Does corporate international diversification destroy value? Evidence from cross-border mergers and acquisitions. *Journal of Banking and Finance* **32:** 2716-2724.

Dosi, G., Teece, D., Winter, S., 1992. Towards a theory of corporate coherence: preliminary remarks. In: Dosi, G., Giannetti, R., Toninelli, P.A. (Eds.), Technology and Enterprise in a Historical Perspective. Clarendon Press, Oxlbrd. e the Takeover Market? *Journal of Finance* **61:** 725-762.

Eckbo BE. 1983. Horizontal mergers, collusion, and stockholder wealth. *Journal of Financial Economics* **11:** 241-273.

Fee CE, Thomas S. 2004. Sources of gains in horizontal mergers: evidence from customer, supplier, and rival firms. *Journal of Financial Economics* **74:** 423-460.

Froot KA. 1989. Consistent Covariance Matrix Estimation with Cross-sectional Dependence and Heteroskedasticity in Financial Data. *Journal of Financial and Quantitative Analysis* **24:** 333-355.

Fuller K, Netter J, Stegemoller M. 2002. What do Returns to Acquiring Firms Tell Us? Evidence from Firms that Make Many Acquisitions. *Journal of Finance* **57:** 1763-1793.

Gaughan PA. 2007. *Mergers, Acquisitions and Corporate Restructurings*. John Wiley and Sons:

Geringer JM, Tallman S, Olsen DM. 2000. Product and International Diversification among Japanese Multinational Firms. *Strategic Managment Journal* **21:** 51-80.

Gozzi JC, Levine R, Schmukler SL. 2008. *Patterns of International Capital Raisings*.

Grant RM, Jammine AP, Thomas H. 1988. Diversity, diversification and profitability among british manufacturing companies. *Academy of Management Journal* **31:** 780.

Greenley G, Oktemgil M. 1998. A comparison of slack resources in high and low performing British companies. *Journal of Management Studies* 377-398.

Gutknecht, J.E. & Keys, J.B. (1993). Mergers, acquisitions and takeover: Maintaining morale of survivors and protecting employees. Academy of Management Executive,7, 26-36

Gugler K, Mueller DC, Yurtoglu BB, Zulehner C. 2003. The Effects of Mergers: An International Comparison. *International Journal of Industrial Organization* **21:** 625-653.

Harford, J., 1999, Corporate cash reserves and acquisitions. Journal of Finance 54, 1969-1997

Haspeslagh PC, Jemison DB. 1991. *Managing Acquisitions: Creating Value Through Corporate Renewal*. New York Free Press: NY.

Higgins, R. C. and L. D. Schall. 'Corporate bankruptcy and conglomerate merger', Journal of Finance, 30, March 1975, pp. 93-114.

Hill CWL, Hitt MA, Hoskisson RE. 1992. Cooperative Versus Competitive Structures in Related and Unrelated Diversified Firms. *Organization Science* **3:** 501-521.

Hitt MA, Hoskisson RE, Ireland RD. 1994. A Mid-Range Theory of the Interactive Effects of International and Product Diversification on Innovation and Performance. *Journal of Management* **20:** 297-326.
Hitt M, Harrison J, Ireland RD, Best A. 1998. Attributes of successful and unsuccessful acquisitions of US firms. *British Journal of Management* **9:** 91-114.
Houston JF, James CM, Ryngaert MD. 2001. Where Do Merger Gains Come From? Bank Mergers from the Perspective of Insiders and Outsiders. *Journal of Financial Economics* **60:** 285-331.
Hoskisson RE, Hitt MA. 1988. *Competing for Advantage*. South-Western College:
Hubbard, R., Palia, D., 1999. A re-examination of the conglomerate merger wave in the 1960s: an internal capital markets view. Journal of Finance 54, 1131}1152.
Huber GP. 1967. *The Behavior of Maximum Likelihood Estimates Under Non-Standard Conditions*. University of California Press: Berkley, CA,.
Jensen M, Ruback R. 1983. The Market for Corporate Control – The Scientific Evidence. *Journal of Financial Economics* **11:** 5-50.
Jensen MC. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review* **76:** 323-329.
Jones GR, Hill CWH. 1988. Transaction Cost Analysis of Strategy-Structure Choice. *Strategic Management Journal* **9:** 159-172.
Kim EH, Singal V. (1993), Mergers and Market Power: Evidence from the Airline Industry. *The American Economic Review* 83: 549-569.
King DR, Dalton DR, Daily CM, Covin JG. 2004. Meta-analyses of Post-Acquisition Performance: Indications of Unidentified Moderators. *Strategic Management Journal* **25:** 187-200.
Krishnan HA, Hitt MA, Park D. 2007. Acquisition Premiums, Subsequent Workforce Reductions and Post-Acquisition Performance. *Journal of Management Studies* **44:** 709-732.
Lancaster K. 1990. The economics of product variety: a survey. *Marketing Science* **9:** 189-206.
Lang L, Stulz RM. 1994. Tobin's Q. Corporate Diversification and Firm Performance. *Journal of Political Economy* **102:** 1248-1280.
Lang L, Stulz RM, Walkling RA. 1991. A Test of the Free Cash Flow Hypothesis: The Case of Bidder Returns. *Journal of Financial Economics* **29:** 315-335.
Lee PM. A comparative analysis of layoff announcements and stock price reactions in the United States and Japan. Strategic Manage J 1997;18: 879 – 94
Lewellen, W.G. 1971. The Ownership Income of Management, National Bureau of Economic Research
Levine R, Schmukler SL. 2006. Internationalization and Stock Market Liquidity. *Review of Finance* **10:** 153-187.
Liebeskind, J.P. & Opler, T.C. (1993). The causes of corporate refocusing. Working paper, University of Southern California, Los Angeles.
Love, E., Nohria, N. 2005. Reducing Slack: The Performance Consequences of Downsizing by Large Industrial Firms, 1977-1993. Strategic Management Journal, 26: 1087-1108
Lichtenberg, F.R. 1992. Industrial De-diversification and its Consequences for Productivity, Journal of Economic Behaviour and Ogranisation, Vol 18, Issue 3, pp 427-438

Majumdar SK, Venkataraman S. 1993. New technology adoption in U.S. telecommunications: The role of competitive pressures and firm-level inducements. *Research Policy* **22:** 521-536.
Markides CC. 1992. Consequences of Corporate Refocusing: Ex Ante Evidence. *Academy of Management Journal* **35:** 398-412.
March, J.G., 1991, Exploration and Exploitation in Organisational Learning, Organisational Science, 2(1) 71-87
Markides CC, Ittner CD. 1994. Shareholder Benefits from Corporate International Diversification: Evidence from U.S. International Acquisitions. *Journal of International Business Studies* **25:** 343-367.
Markides CC, Oyon D. December 1991. *Are the European markets for corporate control competitive?: An (indirect) empirical test*.
Marris RL. 1963. A Model of "Managerial" Enterprise. *Quarterly Journal of Economics* **77:** 185-209.
Martynova M, Renneboog L. 2008. A Century of Corporate Takeovers: What Have We Learned and Where Do We Stand? *Journal of Banking and Finance* **32:** 2148-2177.
Moeller SB, Schlingemann FP, Stulz RM. 2005. Wealth Destruction on a Massive Scale? A Study of Acquiring-Firm Returns in the Recent Merger Wave. *Journal of Finance* **60:** 757-782.
Moeller SB, Schlingemann FP, Stulz RM. 2004. Firm size and the gains from acquisitions. *Journal of Financial Economics* **73:** 228.
Montgomery, C., Diversification, Market Structure and Firm Performance: An Extension of Rumelt's Model, Ph.D. Dissertation, Purdue University, 1979.
Morck, R., B. Yeung, 1992. Internalization : An event study test," Journal of International Economics, vol. 33(1-2), pages 41-56
Moses DO. 1992. Organizational slack and risk-taking behavior: Tests of product pricing strategy. *Journal of Organizational Change Management* **5:** 38-54.
Mueller DC. 1969. A Theory of Conglomerate Mergers. *Quarterly Journal of Economics* **83:** 659.
Mukherjee TK, Kiymaz H, Baker HK. 2004. Merger Motives and Target Valuation: A Survey of Evidence from CFO's. *Journal of Applied Finance* **14:** 7-24.
Mulherin JH, Boone AL. 2000. Comparing Acquisitions and Divestitures. *Journal of Corporate Finance* **6:** 117-139.
Myers S, Majluf N. 1984. Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have. *Journal of Financial Economics* **13:** 187-221.
Neuendorf KA. 2002. *The Content Analysis Guidebook*. Sage Publications:
Nooteboom, B. 1999, Inter-Firm Alliances: Analysis and Design, Routledge, London
Officer MS. 2007. The Price of Corporate Liquidity: Acquisition Discounts for Unlisted Targets. *Journal of Financial Economics* **83:** 571-598.
O'Shaugnessy KC, Flanagan DJ. 1998. Determinants of Layoff Announcements Following M&As: An Empirical Investigation. *Strategic Management Journal* **19:** 989-999.
Palich LE, Cardinal LB, Miller CC. 2000. Curvilinearity in the Diversification-Performance Linkage: An Examination of Over Three Decades of Research. *Strategic Management Journal* **21:** 155-174.
Porter, M.E. (1980) Competitive Strategy, Free Press, New York,

Rajan, R., H. Servaes, L. Zingales, 2000, The Cost of Diversity: The DiversificationDiscount and Inefficient Investment, The Journal of Finance, Vol 55, Issue 1, pp 35-80

Rau, R. P. & T. Vermaelen, 1998. "Glamour, value and the post-acquisition performance of acquiring firms1," Journal of Financial Economics, Elsevier, vol. 49(2), pages 223-253

Ravenscraft DJ, Scherer FM. 1987. *Mergers, Sell-offs and Economic Efficiency*. The Brookings Institution: Washington,DC.

Rhoades SA. 1983. *Power, Empire Building and Mergers*. D.C Heath and Co.: Lexington, MA.

Roll R. 1986. The Hubris Hypothesis of Corporate Takeovers. *Journal of Business* **59:** 197-216.

Rossi S, Volpin P. 2004. Cross-Country Determinants of Mergers and Acquisitions. *Journal of Financial Economics* **74:** 277-304.

Rumelt, Richard P., *Strategy, Structure, and Economic Performance*, Boston, MA: Division of Research, Graduate School of Business Administration., Harvard University, 1974.

Sapienza, P. 2002. The Effects of Banking Mergers on Loan Contracts, The Journal of Finance, Vol. 57, Issue 1, pp 329-367

Sarkissian S, Schill M. 2008. Are there permanent valuation gains to overseas listing? Evidence from market sequencing and selection. *Review of Financial Studies, forthcoming*

Scharfstein DS, Stein JC. 1990. Herd Behaviour and Investment. *The American Economic Review* **80:** 465-479.

Shin H.H, R.M. Stulz, 1998. Are Internal Capital Markets Efficient, The Quarterly Journal of Economics, Vol 113, No.2, pp 531-552

Shleifer, Andrei, and Robert Vishny, 1992, Liquidation values and debt capacity: A market equilibrium approach, *Journal of Finance* 47, 1343-1366.

Schleifer A, Vishny RW. 1989. Entrenchment: The Case of Manager-specific Investments. *Journal of Financial Economics* **25:** 123-139.

Schlingemann F. 2004. Financing Decisions and Bidder Gains. *Journal of Corporate Finance* **10:** 683-701.

Schwert GW. 2000. Hostility in Takeovers: In the Eyes of the Beholder? *Journal of Finance* **55:** 2599-2640.

Schwert GW. 1996. Markup Pricing in Mergers and Acquisitions. *Journal of Financial Economics* **41:** 153-162.

Shahrur H. 2005. Industry structure and horizontal takeovers: Analysis of wealth effects on rivals, suppliers, and corporate customers. *Journal of Financial Economics* **76:** 61-98.

Sirower ML. 1997. *The Synergy Trap*. Free Press:

Smith RL, Kim JH. 1994. The combined effects of free cash flow and financial slack on bidder and target stock returns. *The Journal of Business* **67:** 281-310.

Tan J, Peng MW. 2003. Organizational slack and firm performance during economic transitions: two studies from an emerging economy. *Strategic Management Journal* **24:** 1249-1263.

Wan WP, Yin DW. 2009. From crisis to opportunity: environmental jolt, corporate acquisitions, and firm performance. *Strategic Management Journal* **DOI:10.1002/smj.744:**

Weitzel U, Berns S. 2006. Cross-border takeovers, corruption, and related aspects of governance. *Journal of International Business Studies* **37:** 786-806.

Weston FJ, Mitchell ML, Mulherin HJ. (2004) *Takeovers, Restructuring and Corporate Governance*. Pearson Prentice Hall: Upple Saddle River, New Jersey.
White H. 1980. A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity. *Econometrica* **48:** 817-838.
Williamson OE. 1970. Corporate Control and Business Behaviour: An Inquiry into the Effects of Organisation Form on Entreprise Behaviour, Prentice Hall (Englewood Cliffs, N.J)
Williamson OE. 1967. Hierarchical Control and Optimum Firm Size. *Journal of Political Economy* **75:** 123-138.
Williamson OE. 1964. *The Economics of Discretionary Behaviour*. Prentice-Hall: Englewood Cliffs, NJ.
Wooldridge JM. 2002. *Econometric Analysis of Cross Section and Panel Data*. MIT Press: Cambridge, MA.

Table 5: Pairwise correlation, means, and standard deviation

No.	Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	AR(-20,+1)	0,02	0,16	1														
2	New product	0,61	0,49	-0,03	1													
3	New region	0,25	0,43	-0,02	-0,47*	1												
4	Cost saving	0,08	0,27	0,02	-0,18*	-0,11*	1											
5	Market share	0,58	0,49	0,01	-0,12*	-0,1*	-0,08*	1										
6	Dealsize	0,59	1,7	-0,07*	0	-0,04	0,16*	0,05*	1									
7	Size acquirer	4,69	12,91	-0,09*	0,04	-0,04	0,03	0,05*	0,6*	1								
8	Cash flow	0,08	0,14	-0,07*	0,01	0	0,05	0,02*	0,08*	0,11*	1							
9	Leverage	0,18	0,42	0,01	-0,29*	0,38*	0,02	-0,04*	0,04*	0,02	-0,08*	1						
10	Public target	0,27	0,45	-0,12*	-0,09*	0,05*	0,16*	0	0,34*	0,23*	-0,03	0,16*	1					
11	Tender offer	0,03	0,18	-0,04*	0,04	-0,06*	0,05*	0,03	0,08*	0,08*	0,08*	-0,05*	0,29*	1				
12	Percent stock	27,7	39,2	-0,02	-0,07*	0,01	0,12*	-0,03	0,21*	0,11*	-0,29*	0,08*	0,42*	-0,02	1			
13	Horizontal	0,61	0,49	-0,02	-0,07*	0,06*	0,02	-0,02	0,04	-0,01	-0,01	-0,01	0,09*	-0,01	0,13*	1		
14	Hostile	0,01	0,11	-0,02	-0,01	-0,02	0,07*	-0,02	0,18*	0,06*	0,04*	-0,02	0,13*	0,16*	0,05*	0,01	1	
15	Number bids	1,02	0,19	0,03	-0,02	-0,03	0,06*	0	0,14*	0,06*	0,03	0,01	0,17*	0,14*	0,04*	0,05*	0,2*	1
16	Withdrawn bid	0,04	0,19	-0,02	0	-0,01	0,06*	-0,01	0,09*	0,01	-0,06*	-0,01	0,15*	0,09*	0,12*	0,05	0,29*	0,28*

* significant at the 1% level

Table 6: Test of Hypotheses 1 to 4 (individual motives)

Dependent	Model 1 AR(-20,+1)	Model 2 AR(-20,+1)	Model 3 AR(-20,+1)	Model 4 AR(-20,+1)	Model 5 AR(-20,+1)	Model 6 AR(-20,+1)
New product		-0,009				-0.013*
		[-1.368]				[-1.737]
New region			-0.011**			-0.016**
			[-2.043]			[-2.403]
Cost saving				0,021		0,015
				[1.183]		[0.927]
Market share					0,005	0,003
					[0.725]	[0.375]
Dealsize	0	0	0	0	0	0
	[0.131]	[0.142]	[0.062]	[-0.132]	[0.103]	[-0.145]
Size acquirer	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	[-3.183]	[-3.133]	[-3.180]	[-2.993]	[-3.176]	[-2.920]
Cash flow	-0.064***	-0.065***	-0.062***	-0.067***	-0.064***	-0.065***
	[-3.260]	[-3.280]	[-3.156]	[-3.471]	[-3.275]	[-3.358]
Leverage	0,01	0,007	0,014	0,01	0,01	0,012
	[0.677]	[0.495]	[0.978]	[0.686]	[0.699]	[0.852]
Public target	-0.047***	-0.048***	-0.047***	-0.048***	-0.047***	-0.048***
	[-5.493]	[-5.429]	[-5.484]	[-5.303]	[-5.485]	[-5.313]
Tender offer	-0,002	-0,001	-0,003	-0,001	-0,002	-0,002
	[-0.114]	[-0.040]	[-0.181]	[-0.090]	[-0.136]	[-0.102]
Percent stock	0	0	0	0	0	0
	[1.145]	[1.105]	[1.181]	[1.073]	[1.154]	[1.082]
Number bids	0.058***	0.058***	0.057***	0.058***	0.058***	0.057***
	[4.218]	[4.202]	[4.229]	[4.190]	[4.224]	[4.199]
Horizontal	-0,006	-0,007	-0,006	-0,006	-0,006	-0,006
	[-1.050]	[-1.120]	[-0.969]	[-1.036]	[-1.023]	[-1.011]
Hostile	-0,007	-0,008	-0,007	-0,008	-0,006	-0,008
	[-0.197]	[-0.219]	[-0.198]	[-0.229]	[-0.181]	[-0.248]
Withdrawn bid	-0,021	-0,021	-0,021	-0,022	-0,021	-0,021
	[-1.042]	[-1.023]	[-1.026]	[-1.078]	[-1.036]	[-1.015]
Intercept	-0,017	-0,01	-0,015	-0,018	-0,02	-0,008
	[-0.817]	[-0.480]	[-0.754]	[-0.862]	[-1.050]	[-0.383]
N (obs)	3257	3257	3257	3257	3257	3257
N (clusters)	65	65	65	65	65	65
F	20,007	19,354	23,011	19,836	28,735	27,596
R2	0,032	0,033	0,033	0,033	0,032	0,035
Prob > F	0	0	0	0	0	0

* p<0.1, ** p<0.05, *** p<0.01 [t-values in parenthesis]

clustering at 2-digit-SIC level; year controls incl.; heteroskedasticity-consistent estimator of variance

Table 7: Test of Hypotheses 1 to 4 (motive pairs)

Dependent	Model 7 AR(-20,+1)		Model 8 AR(-20,+1)		Model 9 AR(-20,+1)		Model 10 AR(-20,+1)	
New product &								
New region	0.044**	[2.300]						
Cost saving	0,018	[0.712]						
Market share	-0,005	[-0.609]						
New region &								
New product			0.042**	[2.169]				
Cost saving			-0,036	[-1.203]				
Market share			0,003	[0.279]				
Cost saving &								
New product					0,007	[0.264]		
New region					-0,039	[-1.317]		
Market share					-0,018	[-0.610]		
Market share &								
New product							-0.039**	[-2.368]
New region							-0.029*	[-1.800]
Cost saving							-0,045	[-1.404]
New product	-0.023*	[-1.747]	-0.024**	[-2.218]	-0.012*	[-1.669]	0,02	[1.392]
New region	-0.033***	[-3.098]	-0.032**	[-2.309]	-0.014*	[-1.941]	0,011	[0.917]
Cost saving	0,004	[0.222]	0,013	[0.688]	0,025	[1.277]	0.047**	[2.007]
Market share	0,003	[0.300]	-0,001	[-0.066]	0,004	[0.662]	0.041***	[2.751]
Dealsize	0	[-0.171]	0	[-0.150]	0	[-0.126]	0	[-0.174]
Size acquirer	-0.001***	[-2.864]	-0.001***	[-2.923]	-0.001***	[-2.927]	-0.001***	[-2.949]
Cash flow	-0.066***	[-3.376]	-0.065***	[-3.338]	-0.065***	[-3.366]	-0.066***	[-3.429]
Leverage	0,013	[0.876]	0,013	[0.872]	0,012	[0.835]	0,012	[0.854]
Public target	-0.048***	[-5.208]	-0.048***	[-5.305]	-0.048***	[-5.240]	-0.048***	[-5.113]
Tender offer	-0,002	[-0.138]	-0,002	[-0.156]	-0,002	[-0.142]	-0,002	[-0.125]
Percent stock	0	[1.187]	0	[1.215]	0	[1.036]	0	[1.110]
Number bids	0.056***	[4.270]	0.056***	[4.229]	0.056***	[4.166]	0.056***	[4.135]
Horizontal	-0,005	[-0.894]	-0,005	[-0.903]	-0,006	[-1.027]	-0,006	[-1.001]
Hostile	-0,011	[-0.331]	-0,011	[-0.344]	-0,01	[-0.295]	-0,011	[-0.347]
Withdrawn bid	-0,023	[-1.087]	-0,021	[-1.039]	-0,019	[-0.955]	-0,021	[-1.010]
Intercept	0,002	[0.067]	0,002	[0.067]	-0,009	[-0.484]	-0,041	[-1.505]
N (obs)	3257		3257		3257		3257	
N (clusters)	65		65		65		65	
F	29,457		28,194		23,926		24,049	
R2	0,038		0,038		0,036		0,037	
Prob > F	0		0		0		0	

* p<0.1, ** p<0.05, *** p<0.01 [t-values in parenthesis]

clustering at 2-digit-SIC level; year controls incl.; heteroskedasticity-consistent estimator of variance

Table 8: Test of Hypotheses 5

Dependent	Model 11 AR(-20,+1)	Model 12 AR(-20,+1)	Model 13 AR(-20,+1)	Model 14 AR(-20,+1)	Model 15 AR(-20,+1)
New product	-0,005				-0,016
	[-0.616]				[-1.637]
CF x New prod	-0,053				0,021
	[-1.050]				[0.392]
New region		-0.032***			-0.040***
		[-3.648]			[-3.085]
CF x New reg		0.240***			0.257***
		[3.211]			[2.771]
Cost saving			0,013		0,002
			[0.510]		[0.090]
CF x Cost sav			0,078		0,106
			[0.635]		[0.958]
Market share				0,008	0,003
				[0.888]	[0.361]
CF x Mkt share				-0,036	-0,019
				[-0.676]	[-0.375]
Dealsize	0	0	0	0	-0,001
	[0.106]	[-0.051]	[-0.161]	[0.117]	[-0.254]
Size acquirer	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	[-3.082]	[-3.184]	[-2.976]	[-3.177]	[-2.888]
Cash flow	-0,026	-0.086***	-0.071***	-0,044	-0,1
	[-0.543]	[-4.169]	[-3.869]	[-1.303]	[-1.660]
Leverage	0,008	0,019	0,01	0,01	0,017
	[0.577]	[1.289]	[0.695]	[0.707]	[1.200]
Public target	-0.048***	-0.046***	-0.048***	-0.047***	-0.047***
	[-5.369]	[-5.281]	[-5.327]	[-5.473]	[-5.143]
Tender offer	-0,001	-0,003	-0,002	-0,002	-0,002
	[-0.046]	[-0.193]	[-0.116]	[-0.114]	[-0.128]
Percent stock	0	0	0	0	0
	[1.169]	[1.585]	[1.081]	[1.176]	[1.463]
Number bids	0.058***	0.056***	0.058***	0.058***	0.055***
	[4.207]	[4.058]	[4.204]	[4.161]	[3.995]
Horizontal	-0,007	-0,006	-0,006	-0,006	-0,007
	[-1.172]	[-1.127]	[-1.044]	[-1.034]	[-1.195]
Hostile	-0,008	-0,006	-0,009	-0,007	-0,008
	[-0.231]	[-0.164]	[-0.244]	[-0.192]	[-0.238]
Withdrawn bid	-0,021	-0,021	-0,022	-0,021	-0,022
	[-1.027]	[-1.088]	[-1.130]	[-1.040]	[-1.130]
Intercept	-0,014	-0,014	-0,018	-0,021	-0,004
	[-0.643]	[-0.673]	[-0.848]	[-1.154]	[-0.179]
N (obs)	3257	3257	3257	3257	3257
N (clusters)	65	65	65	65	65
F	25,708	25,096	39,444	28,913	42,844
R2	0,033	0,037	0,034	0,032	0,04
Prob > F	0	0	0	0	0

* p<0.1, ** p<0.05, *** p<0.01 [t-values in parenthesis]
clustering at 2-digit-SIC level; year controls incl.; heteroskedasticity-consistent estimator of variance

Appendix A:

Purpose GEO: Geographical expansion
Keywords: *Geographical(ly), Geographic, Region(s), Regional*

SDC Dealnumber	Examples of announced merger motive (of acquirer)	Machine coding	Manual check	Final code
1470592020	The purpose of the acquisition was to allow Capital Title Group Inc to significantly expand its geographic scope.	GEO	accept	GEO
1714038020	The purpose of the transaction was to allow Orrstown Financial to extend its geographic market and presents opportunity for growth.	GEO	accept	GEO
1818563020	The purpose of the transaction was to broaden the geographic reach of Flotek Industries Inc.	GEO	accept	GEO
994786020	The purpose of the transaction was to create a stronger presence in the Mid-Atlantic region and supports Dollar Tree Stores Inc's ongoing growth strategy.	GEO	accept	GEO
1157129020	The purpose of the transaction was to expand geographically.	GEO	accept	GEO
1727517020	The purpose of the transaction was to expand Southern Energy Homes' geographic market areas.	GEO	accept	GEO
1007570020	The purpose of this transaction was to allow the company to expand its coverage over a greater regional area.	GEO	accept	GEO
1697342020	The transaction will allow MainSource Financial Group Inc to establish a presence in west central Ohio.	-	add	GEO
1522433020	The combined group of theatres will enhance Regal Entertainment Group's presence in California and the Northeast, and will provide its entrance into the Hawaiian markets.	-	add	GEO
1587235020	The purpose of the transaction was to allow Peoples Holding to gain presence in Alabama.	-	add	GEO
1201273020	The purpose of the transaction was to expand AMC Entertainment Inc into the Northeast and upper Midwest.	-	add	GEO
1814212020	The purpose of this transaction was to advance Saia Inc toward their strategic goal of achieving complete coverage across North America.	-	add	GEO